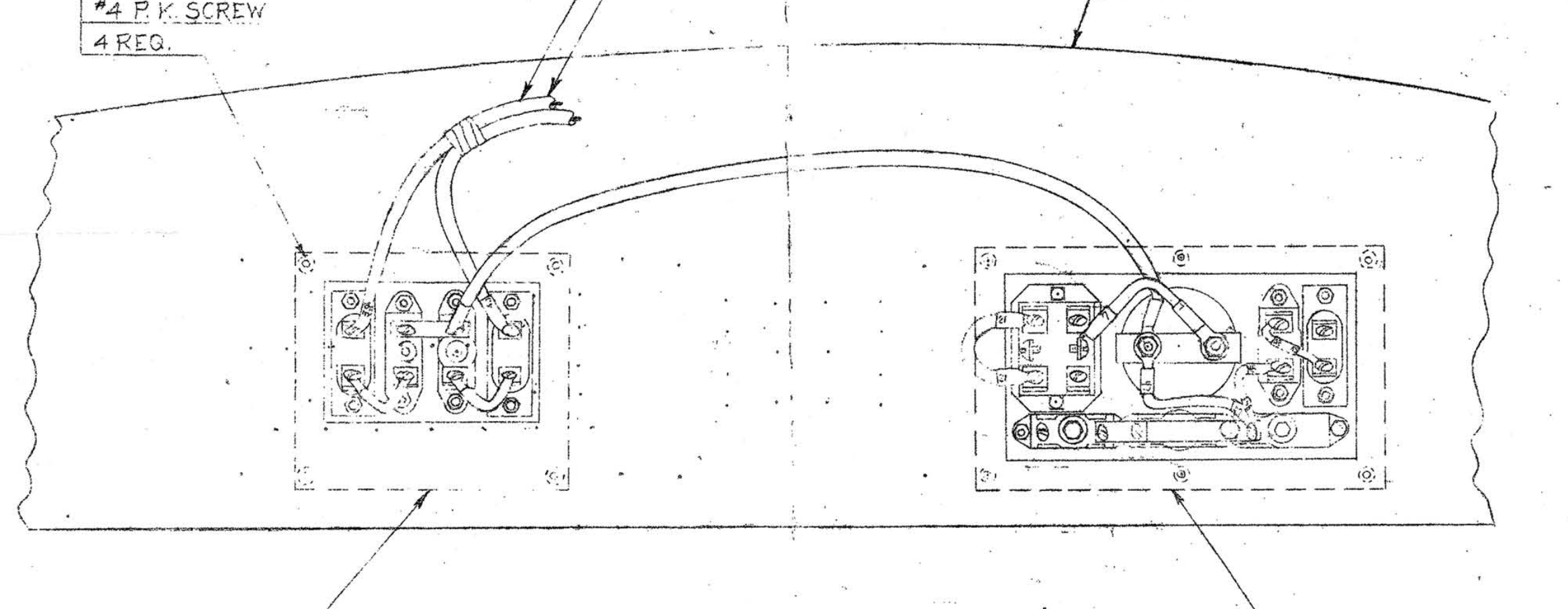
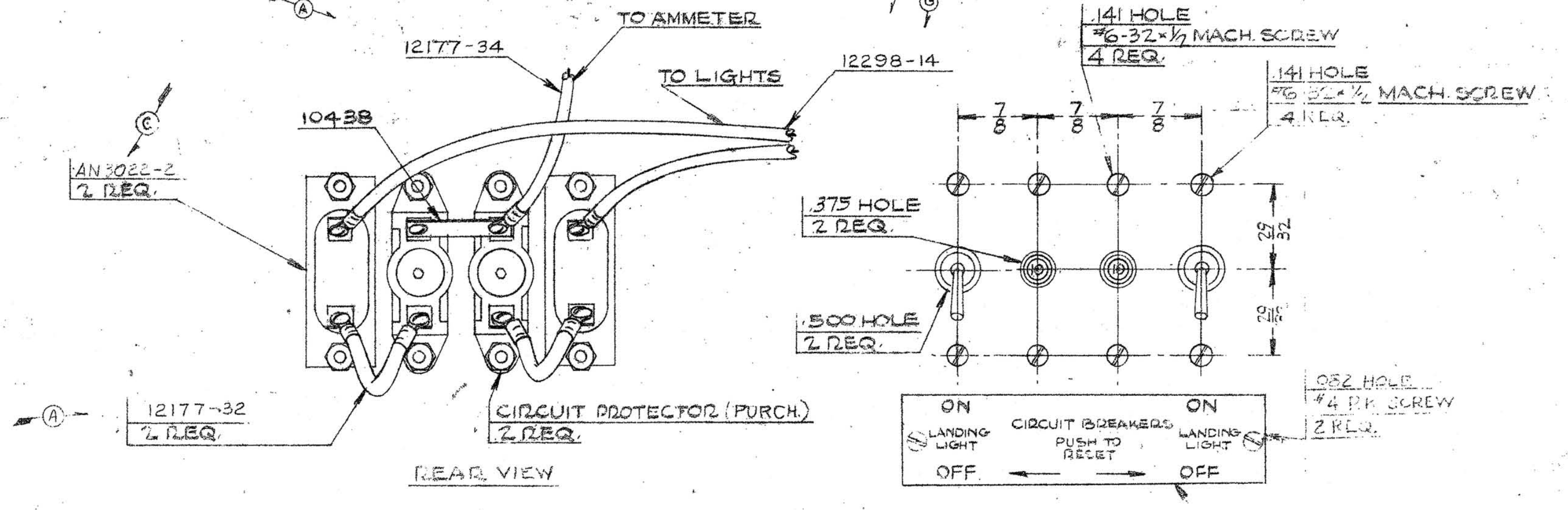


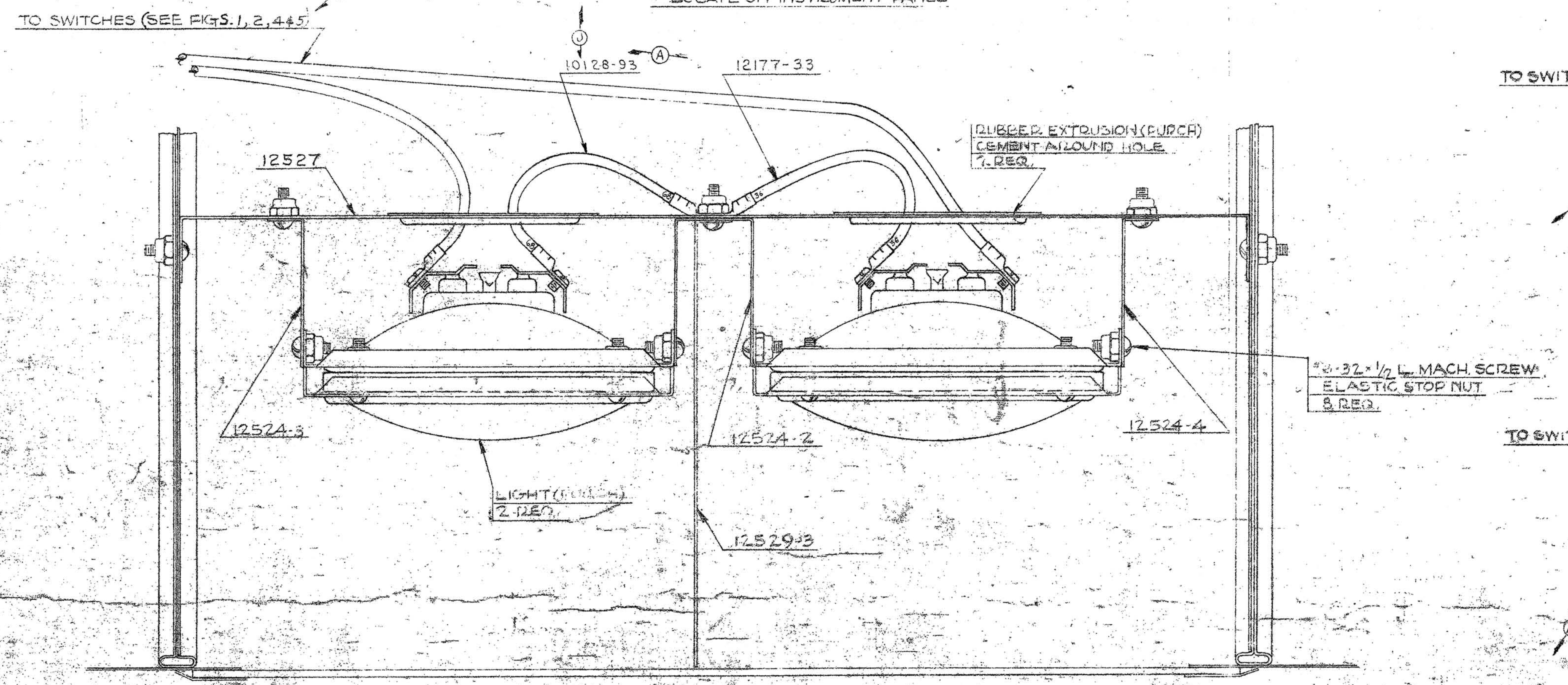
12298-11
TO LEFT WIN
#4 P.K. SCREW
4 REQ.
COCKPIT UPPER RIGHT TRIM PANEL.
12812
SWITCH PANEL

FIG. 5
LIGHT SWITCH & CIRCUIT BREAKER PANEL INST.
MODEL PA-18
(RIGHT SIDE)
6 IN. = 1 FT.

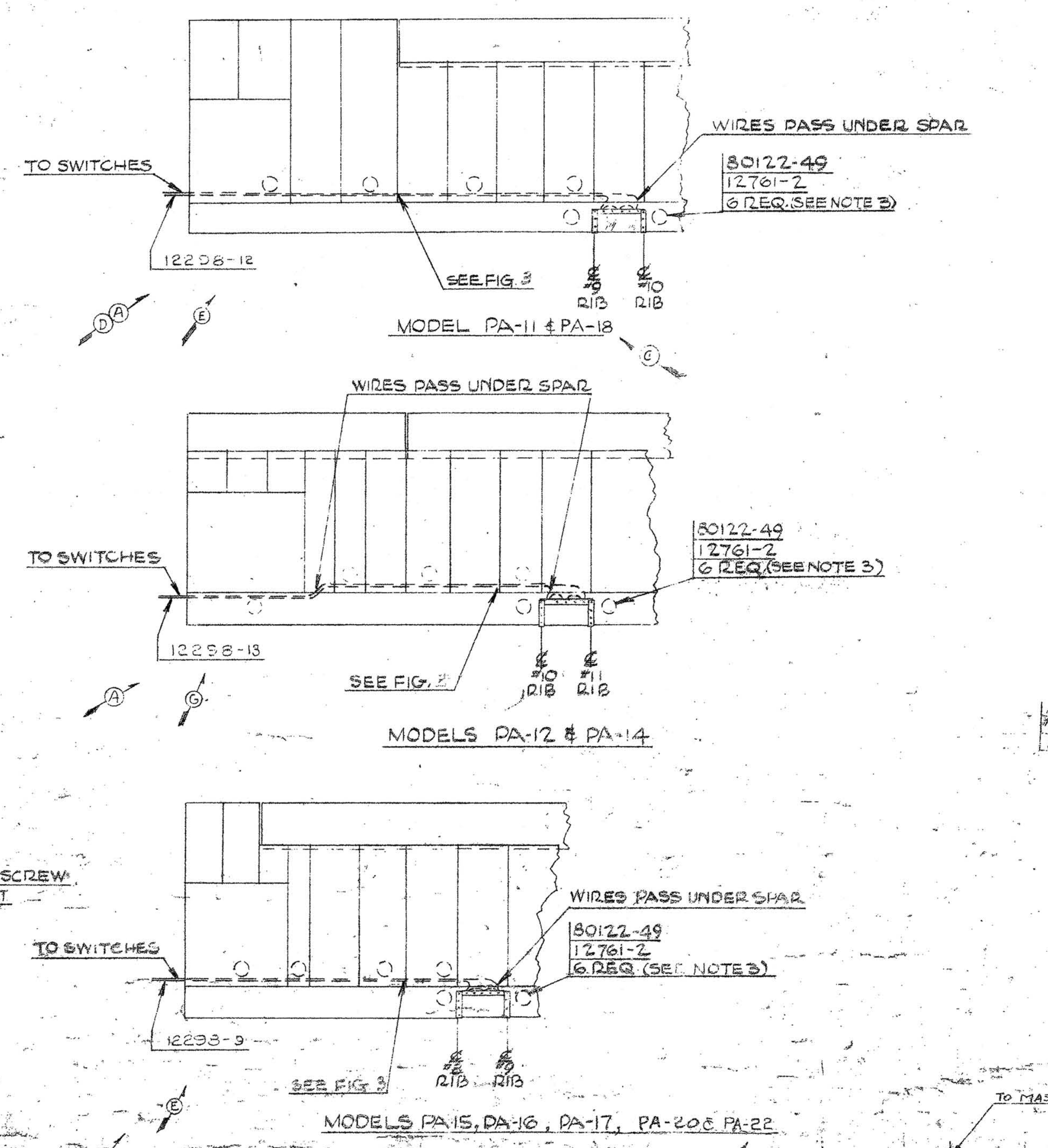


TO AMMETER
12177-34
TO LIGHTS
12298-14
10438
AN3022-2
2 REQ.
12177-32
2 REQ.
CIRCUIT PROTECTOR (PURCH.)
2 REQ.
REAR VIEW
.141 HOLE
#6-32 × 1/2 MACH. SCREW
4 REQ.
.141 HOLE
#6-32 × 1/2 MACH. SCREW
4 REQ.
7/8
7/8
7/8
.375 HOLE
2 REQ.
.500 HOLE
2 REQ.
29/32
29/32
ON
LANDING LIGHT
OFF
CIRCUIT BREAKERS
PUSH TO RESET
ON
LANDING LIGHT
OFF
.082 HOLE
#4 P.K. SCREW
2 REQ.
12530
FRONT VIEW

MODELS–PA-11, PA-12, PA-14, PA-15, PA-16, PA-17
FIG. 1
LIGHT SWITCH & CIRCUIT PROTECTOR INST.
LOCATE ON INSTRUMENT PANEL

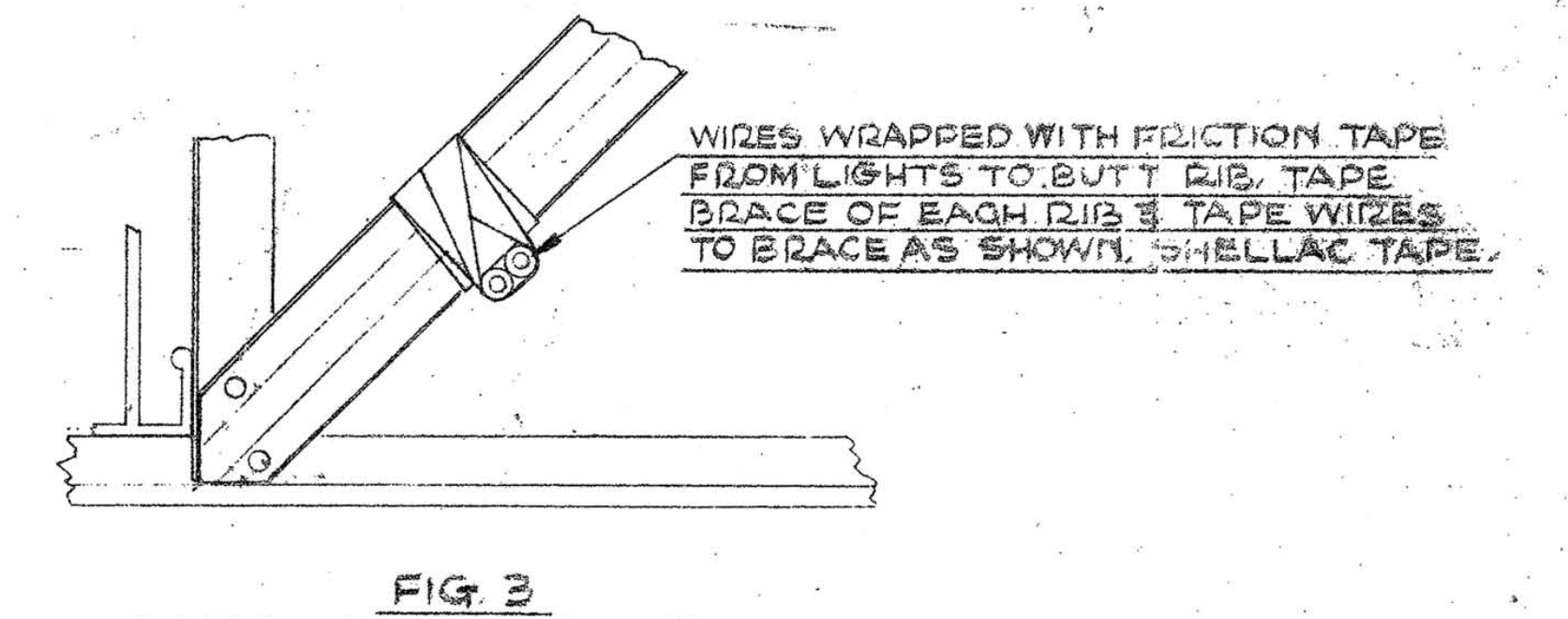


TO SWITCHES (SEE FIGS. 1, 2, 4 & 5)
10128-93
12177-33
12527
RUBBER EXTRUSION (PURCH)
CEMENT AROUND HOLE
1 REQ.
#6-32 × 1/2 L. MACH. SCREW
ELASTIC STOP NUT
8 REQ.
12524-3
12524-2
12524-4
LIGHT (PURCH)
2 REQ.
12529-3



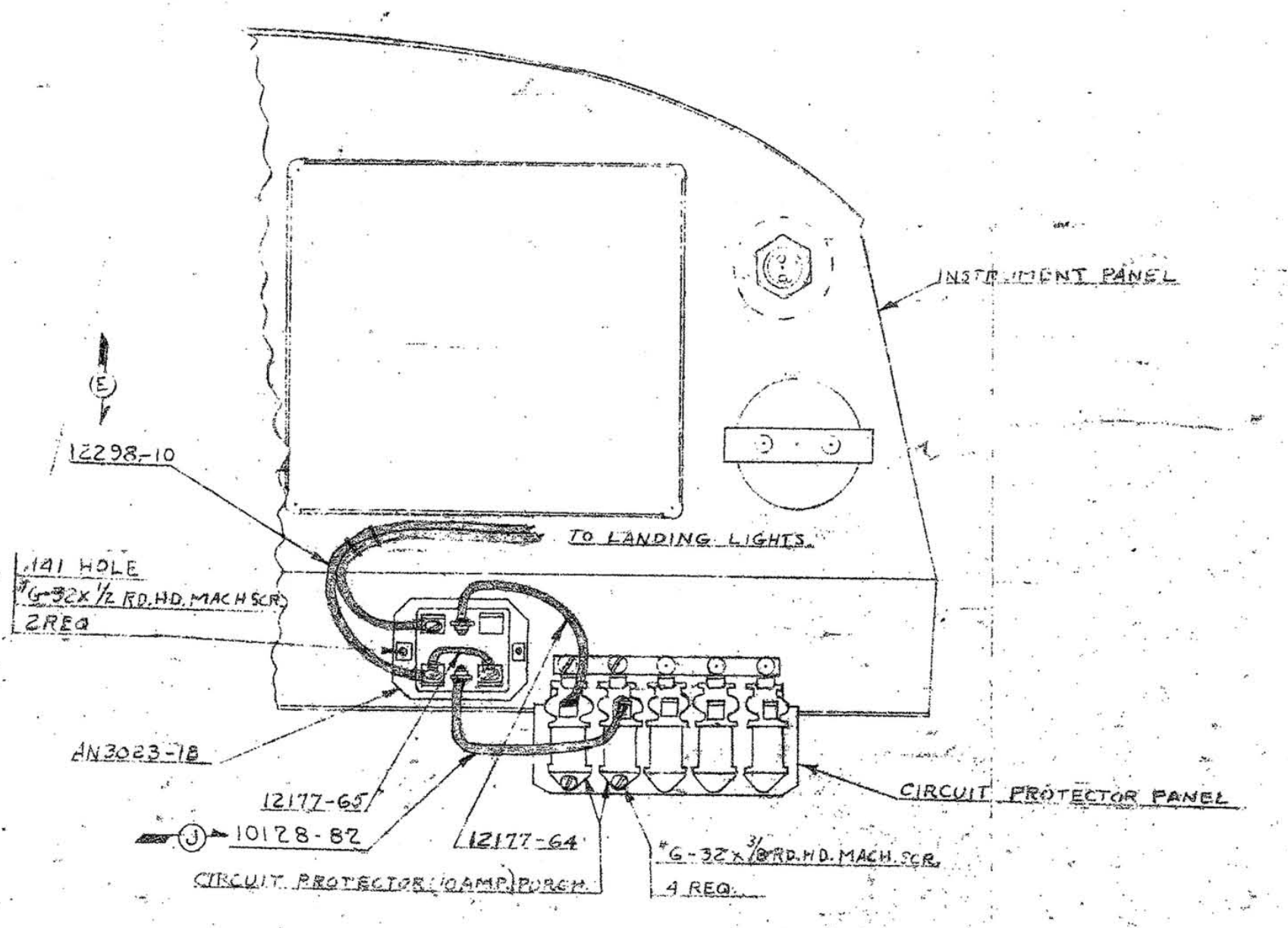
TO SWITCHES
12298-12
SEE FIG. 3
WIRES PASS UNDER SPAR
80122-49
12761-2
6 REQ. (SEE NOTE 3)
℄ #9 RIB
℄ #10 RIB
MODEL PA-11 & PA-18
WIRES PASS UNDER SPAR
TO SWITCHES
12298-13
SEE FIG. 3
80122-49
12761-2
6 REQ. (SEE NOTE 3)
℄ #10 RIB
℄ #11 RIB
MODELS PA-12 & PA-14
TO SWITCHES
12298-9
SEE FIG. 3
WIRES PASS UNDER SPAR
80122-49
12761-2
6 REQ. (SEE NOTE 3)
℄ #8 RIB
℄ #9 RIB
MODELS PA-15, PA-16, PA-17, PA-20 & PA-22

FIG. 2
LIGHT LOCATION & WIRE ROUTING
1/2 IN. = 1 FT.



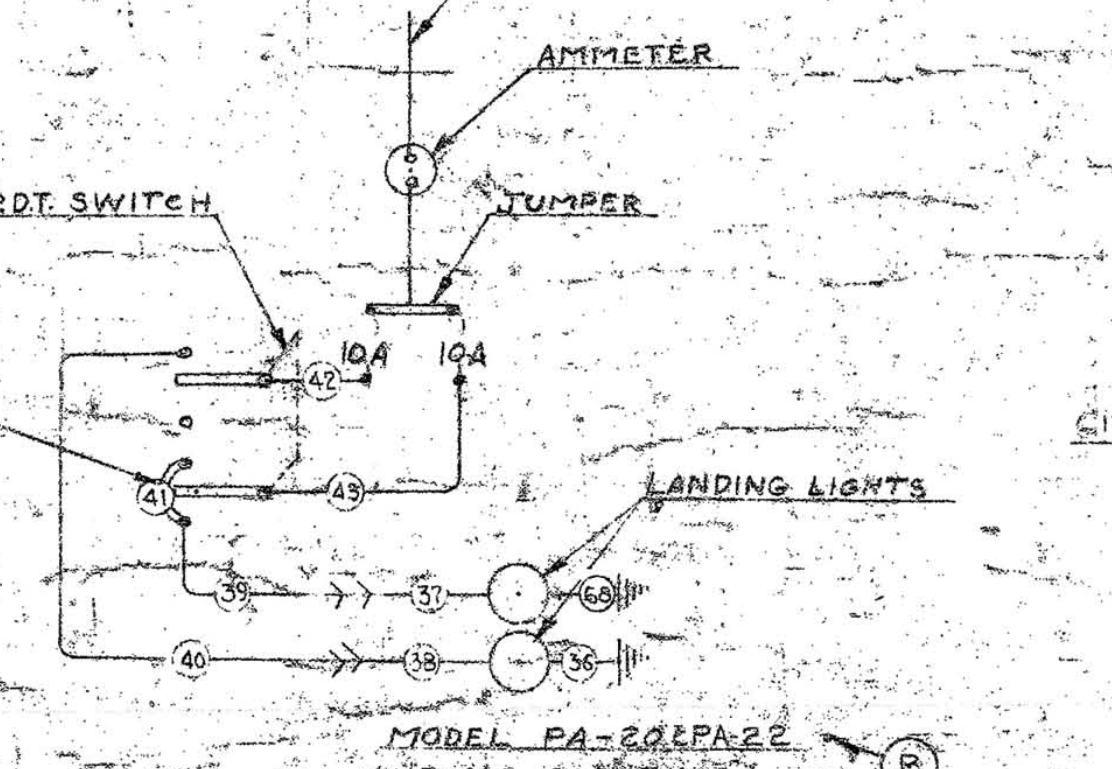
WIRES WRAPPED WITH FRICTION TAPE FROM LIGHTS TO BUTT RIB. TAPE BRACE OF EACH RIB & TAPE WIRES TO BRACE AS SHOWN. SHELLAC TAPE.

FIG. 3
WIRE ATTACHMENT AT RIB.



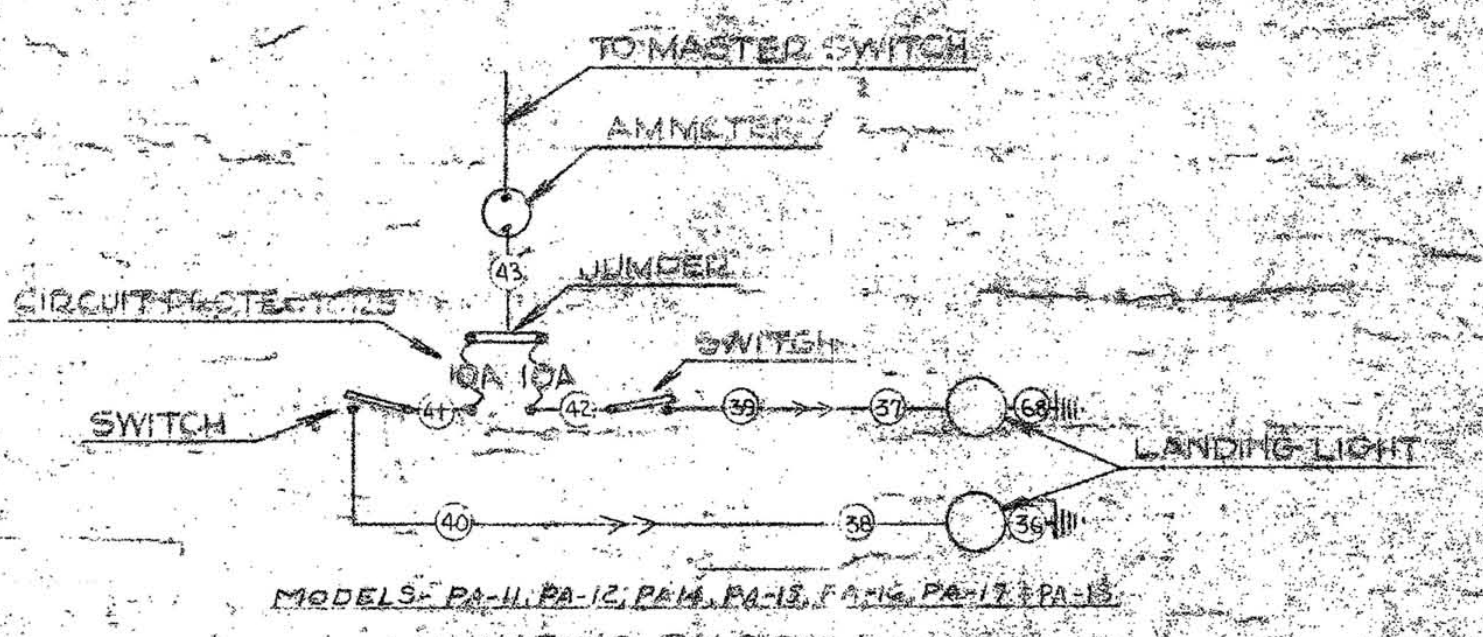
INSTRUMENT PANEL
12298-10
TO LANDING LIGHTS.
.141 HOLE
#6-32 × 1/2 RD. HD. MACH. SCR.
2 REQ.
AN3023-18
12177-65
10128-82
12177-64
CIRCUIT PROTECTOR (10 AMP) PURCH.
#6-32 × 3/8 RD. HD. MACH. SCR.
4 REQ.
CIRCUIT PROTECTOR PANEL
PA-20 & PA-22 ONLY

FIG. 4
INSTRUMENT PANEL WIRING



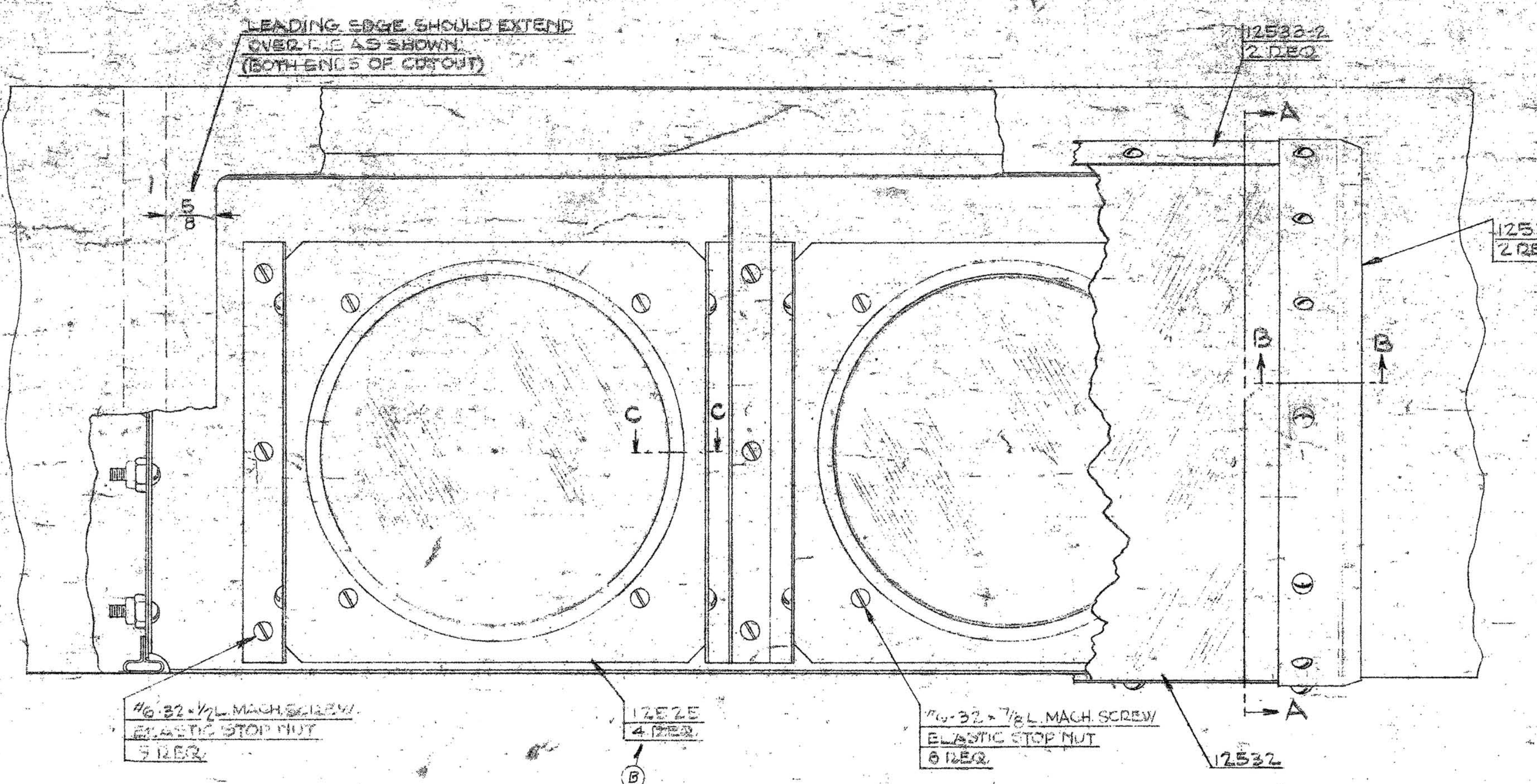
TO MASTER SWITCH.
AMMETER
DPDT SWITCH
JUMPER
JUMPER
10A
10A
42
41
43
39
37
40
38
68
36
LANDING LIGHTS

MODEL PA-20 & PA-22
WIRING DIAGRAM

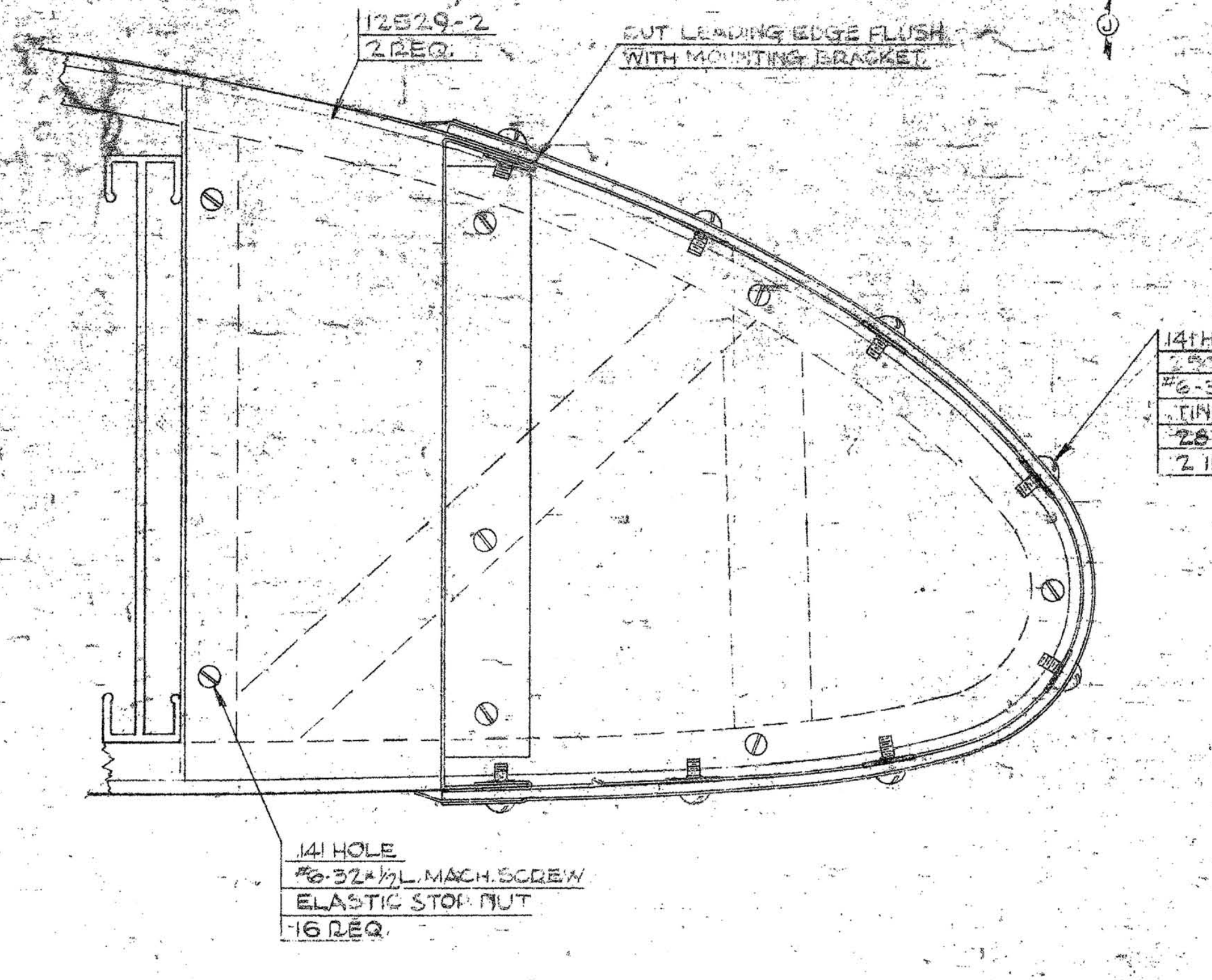


TO MASTER SWITCH
AMMETER
43
JUMPER
CIRCUIT PROTECTORS
10A
10A
SWITCH
SWITCH
41
42
39
37
68
40
38
36
LANDING LIGHT

MODELS–PA-11, PA-12, PA-14, PA-15, PA-16, PA-17 & PA-18
WIRING DIAGRAM

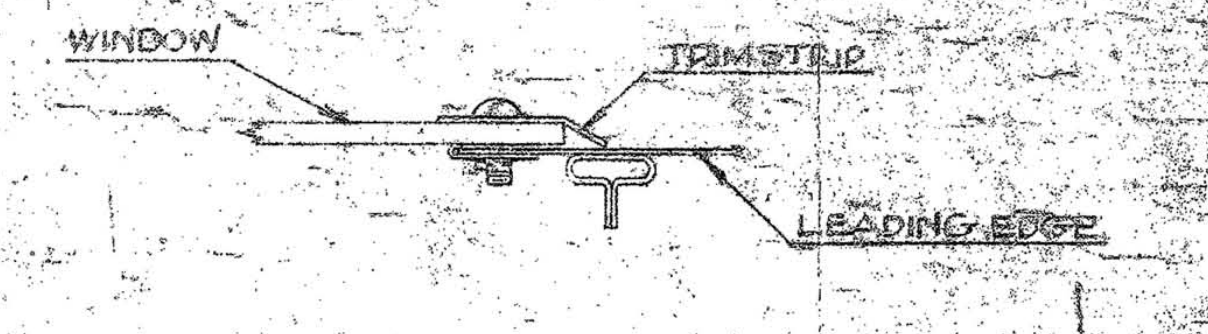


LEADING EDGE SHOULD EXTEND OVER L.E. AS SHOWN. (BOTH ENDS OF CUTOUT)
12533-2
2 REQ.
5/8
A
A
B
B
C
C
12533-3
2 REQ.
#6-32 × 1/2 L. MACH. SCREW
ELASTIC STOP NUT
9 REQ.
12525
4 REQ.
#6-32 × 7/8 L. MACH. SCREW
ELASTIC STOP NUT
8 REQ.
12532



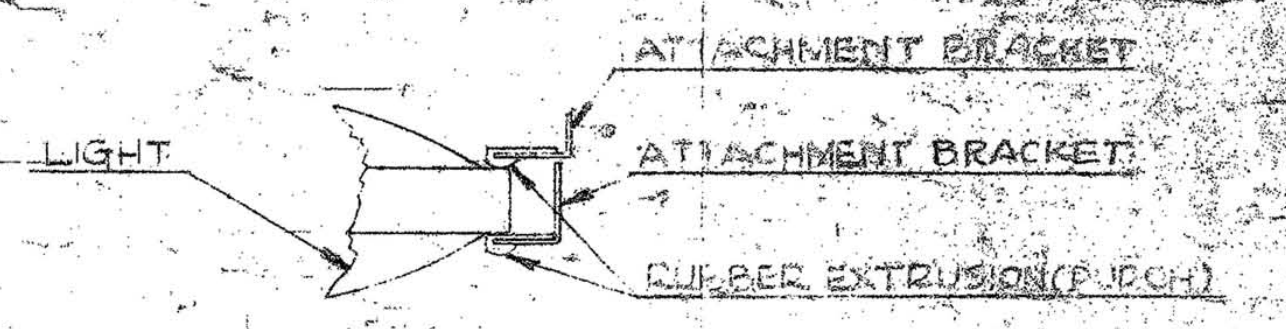
12529-2
2 REQ.
CUT LEADING EDGE FLUSH WITH MOUNTING BRACKET.
.141 HOLE
.250 HOLE IN WINDOW
#6-32 × 1/2 L. MACH. SCREW
TINNERMAN NUT #A188-632-1
28 REQ. (SPACE APPROX. 2 IN. APART)
.141 HOLE
#6-32 × 1/2 L. MACH. SCREW
ELASTIC STOP NUT
16 REQ.

SECTION A-A



WINDOW
TRIMSTRIP
LEADING EDGE

SECTION B-B



ATTACHMENT BRACKET
ATTACHMENT BRACKET
LIGHT
RUBBER EXTRUSION (PURCH)

SECTION C-C

NOTES:

1. THIS INSTALLATION TO BE MADE ONLY ON AIRPLANES INCORPORATING A 12 VOLT ELECTRICAL SYSTEM.

3. GROMMETS 80122-49 MAY BE DOPED TO UNDERSIDE OF WING TO FACILITATE INSTALLATION. LOCATE APPROX. AS SHOWN. COVER OPENINGS WITH INSPECTION COVER 12761-2.

INSPECTION ORGANIZATION
MASTER FILES
OCT 6 1953

E.C.O. 2751

PART NO.	NO. REQ.	SIZE	DESCRIPTION
10128-82	1		WIRE ASSY (ON PA-20 & PA-22 ONLY)
10128-93	1		WIRE ASSY.
#4	4	1/4 L	TYPE Z P.K. SCREWS (PA-18)
12298-11	1		WIRE HARNESS ASSY (PA-18)
12812	1		PANEL ASSY. PA-18 [illegible]
AN3023-18	1		SWITCH ASSY (PA-20 & PA-22)
12298-10	1		WIRE HARNESS ASSY PA-20 & [illegible]
12177-65	1		WIRE ASSY [illegible]
12177-64	1		[illegible]
	1		[illegible] FRICTION TAPE
12298-13	1		WIRE HARNESS ASSY (MODEL [illegible])
12298-9	1		WIRE HARNESS ASSY MODEL PA-16 [illegible]
12298-14	1		[illegible]
	1	72 L	RUBBER EXTRUSION [illegible] PURCH. B.F. GOODRICH CO.
	2		#4509 LIGHT 100W 12V PURCH. GENERAL ELECTRIC
	2		TYPE PSM CIRCUIT PROTECTOR [illegible] THERMOSTAT [illegible]
12298-12	1		HARNESS ASSY WIRE PA-11 & PA-18 [illegible]
	28		#A188-632-1 TINNERMAN NUT
	43		#6 [illegible] ELASTIC STOP NUT
#6-32	8	7/8 L	RD. HD. MACH. SCREW
#6-32	73	1/2 L	
#4	2	1/4 L	TYPE A STOVE HD. P.K. SCR.
#6-32	4	3/8 L	RD. HD. MACH. SCR. (PA-20 & PA-22)
AN3022-2	2		SWITCH (PA-11, PA-12, PA-14, PA-15, PA-16, PA-17)
12177-34	1		WIRE ASSY (PA-11, PA-12, PA-14, PA-15, PA-16, PA-17)
12177-33	1		WIRE ASSY
12177-32	2		WIRE ASS'Y (PA-11, PA-12, PA-14, PA-15, PA-16, PA-17)
80122-49	6		GROMMET
12761-2	6		COVER
12533-3	2		STRIP
12533-2	2		
12532	1		WINDOW
12530	1		PLACARD (PA-11, PA-12, PA-14, PA-15, PA-16, PA-17)
12529-3	1		PLATE
12529-2	2		
12527	1		PLATE
12525	4		PLATE
12524-4	1		BRACKET
12524-3	1		
12524-2	1		BRACKET
10438	1		JUMPER (PA-11, PA-12, PA-14, PA-15, PA-16, PA-17)

MATERIAL

LET.	REVISION	DATE	BY
K	A188-632-1 TINN. NUT WAS A188-62-1	8-20-53	L.M.M.
J	MARKER NOS. ADDED TO WIRING DIAGRAMS. 10128-93 WAS 12177-33, 10128-82 WAS 12177-64	2-16-53	L.M.M.

LET.	REVISION	DATE	BY
H	A188-62-1 WAS 188-M-1	2-16-53	[illegible]
G	12298-13 WAS 12298-4, 12298-14 WAS 12298-2, NOTE 2 REM.	3-21-51	L.M.M.
F	3 7/8, 7 DIM. & NOTE REMOVED	2-26-51	L.M.M.
E	12298-9 WAS 12298-3, 12298-10 WAS 12298-5, 12298-11 WAS 12298-6, 12298-12 WAS 12298-7, PA-22 REF. ADDED	2-16-51	L.M.M.
D	FIG. 5 REV. 12298-7 WAS 12298-4	2-24-50	[illegible]
C	AN3022-2 WAS AN3015-B5A. INST. DETAILS FOR PA-18 ADDED	[illegible]	[illegible]
B	2 OF 12525 ADDED. 4 OF 12528 REM. INSTALLATION DETAILS FOR PA-20 ADDED	1-19-50	J.O.
A	12177-32, -33 & -34, 12298-3 & -4 ADDED FOR WIRES	[illegible]	R.K.

MODEL	PER PLANE	NEXT ASSEMBLY	SUPERSEDES	SUP. BY

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PIPER AIRCRAFT CORP.
LOCK HAVEN, PENNA.

SCALE FULL SIZE & NOTED
TOTAL WT. LBS.
FINISH—PIPER SPECIFICATION #10
MANUFACTURING PRACTICES—PIPER SPECIFICATION #9

LIGHT INSTALLATION—LANDING

DRAFTSMAN	CHECKER	STANDARDS
R.C. 7/28/48	H.E.K. 7-28-48	

12534